



EPIDEMIOLOGY BULLETIN

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HEAD LICE

Reports of head lice infestation from school systems and health departments from around the State have increased as they usually do this time of year; and it is stated that the county as a whole has been experiencing an increase in this problem over the last several years. Therefore, a few points may be worth reviewing about the problem.¹

Biology - Head lice (Pediculus humanus capitis) have not been reported to transmit human disease. The lifespan of the louse is about a month when on the host, only about 48 hours away from the host, but eggs can survive in the environment for 2-3 weeks.

Diagnosis - Adult crawling forms and nits (eggs) are found by direct visual inspection of the scalp especially at the nape of neck and behind ears. Nits located greater than 1/4" from the scalp are not viable.

Treatment² - The two preparations in wide use are lindane shampoo (gamma benzene hexachloride, KWELL - Reed & Carnrick) and pyrethrins with piperonyl butoxide (RID - Pfipharmecs and others), the latter being a nonprescription item. Although no serious adverse effects have been reported from using lindane for the treatment of head lice, it can be irritating to the skin, mucous-membranes and eyes, and can cause dermatitis if used too often. It should not be used on acutely inflamed areas. The MEDICAL LETTER does not recommend lindane over pyrethrins with piperonyl butoxide. With either preparation, retreatment in 7-10 days is recommended, to kill newly hatched lice. Successful treatment depends more on using the preparation according to the directions rather than what preparation is used. Adverse reactions occur very infrequently when the preparations are applied in the recommended amounts.

Disinfection of Fomites - Fumigation is not necessary! All clothing and bed linen which have been in contact with the infected person should be machine washed, or dry-cleaned if not washable. As an alternative, clothing can be stored in tightly closed plastic bags for 2 weeks. Brushes and combs should be soaked in 2% lysol for 1 hour or heated in 150° water for 5-10 minutes.

Control - Schools are empowered to send infected children home for treatment, but to be effective a school program must involve screening of all children. During a school outbreak, it is important that childrens' hats and coats be stored separately at school.

- REFERENCES: 1. CONTROLLING HEAD LICE: Center for Disease Control, Atlanta, Ga. Reprinted by Virginia Health Department.
2. TREATMENT OF HEAD LICE: MEDICAL LETTER, Vol. 22, No. 16, 8-8-80.

THE NEW RABIES VACCINE

Progress Report - First Six Months

The new human diploid cell vaccine (HDCV) for rabies was approved just six months ago. This seems an appropriate time to review the statewide experience with this new vaccine.

One of the first questions to be answered is whether there are significant side effects to this new vaccine. Of the 56 patients treated so far, 51 had no adverse reactions. The five patients who experienced any reaction and their symptoms and duration were as follows:

- 1 mild headache for one day
- 3 slight nausea for one day
- 1 frontal headache, fever 100°-101°F for one day

Thus from our data to date this seems like a very safe vaccine to use.

The sex incidence of those treated was almost equal, 30 males to 26 females. The age range was quite broad covering 2 to 85 (ages available on 52 of the 56 treated). The highest incidence was in the 10-19 age group and 13 (25% of those whose age was known) were 10 to 14 years old.

Other information that appeared about these 56 people treated with rabies vaccine was most interesting. For instance, exposure was a bite in 41 cases, but non-bite in 15. Some non-bite exposures certainly need therapy. For instance, a person with open cuts on his hands who gets saliva from a raccoon that turns out to be positive for rabies is appropriately treated with rabies vaccine. However, someone who pets a cat 31 days prior to its being found positive probably does not need rabies prophylaxis.

Also, of some concern is the apparent delay in treating patients. Of the 52 that we have data about, 13(25%) were treated on the day of exposure or the first day thereafter. Sixteen more were treated in the rest of the first week. Then another 13(25%) were treated during the second week; six more during the third week; but then three patients were begun on therapy on the 33rd day and one on the 37th day after exposure!

Of the 51 animals whose contact occasioned the treatment with rabies prophylaxis only five were proved rabid: raccoon, skunk, horse, bat, and cat. Eleven were said to be negative and 35 were not tested at all. Most of these latter animals could not be found after the exposure.

Of some interest was the fact that four of the 56 were exposed outside of Virginia: Kentucky 2, Minnesota 1, Alaska 1.

The animal causing the exposure was known in 55 instances. Fourteen of these 55 were dogs. That is particularly interesting in view of the fact that no dog has been found positive for rabies in Virginia since 1976. Another fourteen were treated because of cat exposure - six because of exposure to the same cat. Prior to October, there had not been a cat positive for rabies in Virginia since 1974. However, in October, a cat that had been in a fight with some animal was positive for rabies.

Other animal exposures were:

Bat	- 11
Skunk	- 7
Raccoon	- 4
Opossum	- 1
Horse	- 1
Fox	- 1
Squirrel	- 1
Rat	- 1

At this time the supply of the new HDCV is somewhat more plentiful than it was in June and may be used for appropriate indications. If there are any questions about use in a specific case you should refer them to your local district health officer or the Division of Epidemiology.

A recent MMWR (December 19, 1980) gave nationwide data on adverse reactions to the new HDCV. Of approximately 2500 people who had received the HDCV during the 12 week period June 23-September 15 only four patients (1 per 625 treated) had systemic reactions which ranged from hives to anaphylactic shock. Two of these four had past histories of allergies to other drugs; two had no history of allergies. There were four cases of fever and headache (1 per 625 treated) as well. These resolved within 24 hours and occasionally recurred with subsequent injections of HDCV. Also occasionally reported were systemic reactions such as chills, diarrhea, malaise, headache without fever and fever without headache. Less than 25% of people treated had local reactions such as redness, swelling or pain at site of injection. To date, no deaths or encephalopathy have been reported following HDCV.

SALMONELLA HADAR OUTBREAK

There has been a Thanksgiving-related foodborne outbreak of gastroenteritis in northern Virginia which appears to be attributable to Salmonella hadar. That species of salmonella was identified in 1970 in England, became established in turkey flocks, and is now the second most prevalent serotype there. It has spread to the Western Hemisphere with the importation of turkeys, having been noted in Canada since 1977, and sporadically in the U.S. since 1978. This episode in Fairfax County likely represents the first report of a foodborne outbreak related to S. hadar in this country.

REFERENCE: MMWR: October 24, 1980/Vol. 29/No. 42

MONTH: NOVEMBER

DISEASE	STATE					REGIONS				
	THIS MONTH	LAST MONTH	TOTAL TO DATE		MEAN 5 YEAR TO DATE	THIS MONTH				
			19 80	19 79		N.W.	N.	S.W.	C.	E.
CHICKENPOX	27	2	403	947	957.8	1	9	11	3	3
MEASLES	1	33	339	279	1,337.0	1				
MUMPS	6	4	74	95	280.0			5	1	
PERTUSSIS	3		10	12	15.4	2	1			
RUBELLA	4	2	57	204	318.8	3	1			
MENINGITIS - ASEPTIC	16	24	177	251	152.8	2	1	3	3	7
BACTERIAL	16	10	163	153	106.0	4	4	3	1	4
ENCEPHALITIS - INFECTIOUS	3	3	33	28	26.4		2		1	
POST-INFECTIOUS			5	15	7.6					
HEPATITIS A (INFECTIOUS)	29	28	292	248	300.6	3	9	4	4	9
B (SERUM)	42	33	480	413	272.0	1	10	3	18	10
SALMONELLOSIS	110	150	1,191	1,084	755.4	13	18	14	24	41
SHIGELLOSIS	69	20	188	254	150.6		4	65		
TUBERCULOSIS - PULMONARY	16	40	413	539	592.0					
EXTRA-PULMONARY	2	5	87	101	92.6					
SYPHILIS (PRIMARY & SECONDARY)	63	51	539	447	512.6	4	11	1	7	22
GONORRHEA	2,502	2,071	21,528	21,385	22,491.4					
ROCKY MOUNTAIN SPOTTED FEVER	2	5	94	90	113.2	2				
RABIES IN ANIMALS	5	8	26	20	41.2	3		1	1	
MENINGOCOCCAL INFECTIONS	8	1	58	81	48.6	1		1	2	4
INFLUENZA	28	12	810	387	5,718.4			28		
MALARIA	6	2	63	27	16.6		5		1	
OTHER: <i>TULAREMIA</i>	1		1	2	3.6			1		

COUNTIES REPORTING ANIMAL RABIES: Hanover - 1 bat; Lee - 1 sk.; Page - 1 sk.; Shenandoah - 1 rac., 1 sk.
 OCCUPATIONAL ILLNESSES: Occupational pneumoconioses 10, Occupational dermatitis 2, Occupational hearing loss 1, Asbestosis 1.

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